

**REMARKS**

Claims 1-4 are pending. By this amendment, Claims 1-4 are amended.  
Applicant respectfully submits that no new matter is presented herein.

Entry of this Amendment is respectfully requested.

**Personal Interview**

Applicant respectfully acknowledges and appreciates the courtesies extended to the Applicant's representative by the Examiner during the personal interview conducted on January 26, 2005. The points discussed during the interview are incorporated herein.

**Claims Rejected—35 U.S.C. § 102**

Claims 1-4 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,687,045 to Okai et al. ("Okai"). To the extent the rejection remains applicable to the claims, as amended, Applicant respectfully traverses the rejection.

Claim 1 discloses a method for manufacturing a thin-film magnetic head in a wafer fabrication process including, among other steps, sequentially depositing a first magnetic layer, a non-magnetic layer, and a second magnetic layer and forming a three-layer pole tip structure located between an air bearing surface and a position at a predetermined height from the air bearing surface by ion milling the first magnetic layer, the non-magnetic layer, and the second magnetic layer, at the same time free and from using a reactive gas.

Okai discloses a thin film magnetic head including a sintered ceramic substrate (11), an underlayer (12), a bottom magnetic core film (13), a magnetic gap film (14), an

insulating film (15) containing coil windings (16), a top magnetic core film (13'), and a protective layer (17).

As agreed during the personal interview, Okai does *not* disclose or suggest ion milling the bottom magnetic core film (13), the magnetic gap film (14), and the top magnetic core film (13'), ***at the same time and free from using a reactive gas***. As stated in column 10, lines 15-33, the bottom magnetic core film (13) is ion milled to form a magnetic core ***before*** deposition of the magnetic gap film (14) and the top magnetic core film (13'). Therefore, Okai does *not* disclose or suggest forming a three-layer pole tip structure located between an air bearing surface and a position at a predetermined height from the air bearing surface by ion milling the first magnetic layer, the non-magnetic layer, and the second magnetic layer, ***at the same time and free from using a reactive gas***, as recited in Claim 1.

Moreover Applicant respectfully submits that Okai does *not* disclose or suggest forming, ***in a wafer fabrication process***, a non-magnetic layer from a material having ***an etch rate equal to or higher than that of a material of a first magnetic layer and a second magnetic layer during ion milling free from using reactive gas***. On the contrary, Okai discloses only etching rates of inorganic insulating films for ***wet etching executed during a slider machining process***, *not* during a wafer fabrication process. See, e.g., column 8, lines 44-61; column 10, line 53 through column 11, line 25; and column 12, line 30 through column 13, line 58 of Okai. Consequently, Applicant respectfully submits that Okai does not disclose or suggest ***ion milling the non-magnetic layer made from a material having an etching rate, for ion milling free***

***from using reactive gas, equal to or higher than that of a material of the first magnetic layer and the second magnetic layer***, as recited in Claim 1.

During the personal interview conducted on January 26, 2005, the Examiner argued that Okai disclosed such a feature, because Okai discloses using Ta<sub>2</sub>O<sub>5</sub> at column 12, lines 45-62. Nevertheless, because Okai does *not* disclose or suggest etching rates for ion milling executed during a wafer fabrication process, it is *impossible* for Okai to disclose the feature of ***ion milling the non-magnetic layer made of a material having an etching rate, for ion milling free from using reactive gas, equal to or higher than that of a material of the first magnetic layer and the second magnetic layer***.

As also agreed during the personal interview, Okai does ***not*** disclose or suggest ion milling free from using a reactive gas, as recited in Claim 1. Rather, Okai at column 10, lines 44-48 discloses using O<sub>2</sub>, a mixture gas of Ar-O<sub>2</sub>, or Ar gas as a *sputtering gas*, ***not*** as a *dry etching gas*.

As such, Applicant respectfully submits that Okai does not disclose or suggest each and every feature recited in Claim 1.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. M.P.E.P. § 2131. For at least for the reasons explained above, Applicant respectfully submits that Claim 1 is not anticipated, or rendered obvious in view of, Okai. Consequently, Applicant respectfully submits that Claim 1 should be deemed allowable.

Claims 2-4 depend from Claim 1 and, as such, incorporate each and every feature recited therein. Accordingly, Applicant respectfully submits that Claims 2-4

should be deemed allowable for at least the same reasons Claim 1 is allowable, as well as for the additional subject matter recited therein.

Therefore, Applicant respectfully requests withdrawal of the rejection.

**Conclusion**

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding rejection, allowance of Claims 1-4, and the prompt issuance of a Notice of Allowability are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 100186-00020**.

Respectfully submitted,  
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